

# Notice of Allowability

Application No.

10/038,623

Examiner

Steven J. Ganey

Applicant(s)

DEMERE ET AL.

Art Unit

3752

## -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to amendment filed June 24, 2004.
2. ☒ The allowed claim(s) is/are 1-29.
3. ☒ The drawings filed on 08 January 2002 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All    b) ☐ Some\*    c) ☐ None    of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

### Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08),  
Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit  
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413),  
Paper No./Mail Date \_\_\_\_\_
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_

### EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

2. The application has been amended as follows:

In the claims:

Claim 22, line 11, the phrase "the long axis" has been changed to --the longitudinal axis--.

The above change was done to maintain proper antecedent basis.

3. The following is an examiner's statement of reasons for allowance of claims 1-19: The prior art did not teach or suggest a fuel injector as claimed by the applicant, specifically a fuel injector comprising a housing positioned adjacent the working air gap and supporting the coil on the tube assembly, the housing extending around the coil and having a ferromagnetic inner wall extending between the coil and the non-magnetic tube, the ferromagnetic inner wall has an opening with a width that is substantially less than the length of the coil as measured parallel to the longitudinal axis, together in combination with the other claimed features of applicant's invention.

4. The following is an examiner's statement of reasons for allowance of claims 20 and 21: The prior art did not teach or suggest a fuel injector as claimed by the applicant, specifically a fuel injector comprising a bobbin inserted in the sleeve and having a ferromagnetic portion

engaging the outer surface of the tube on each side of the working air gap; and an electrical coil mounted on the bobbin, the electrical coil connectable to an electrical power source and operable to displace the armature relative to the pole piece and against the bias on the armature, the ferromagnetic portion being disposed between the tube and the electrical coil, together in combination with the other claimed features of applicant's invention.

5. The following is an examiner's statement of reasons for allowance of claims 22-28: The prior art did not teach or suggest a fuel injector as claimed by the applicant, specifically a fuel injector comprising a bobbin inserted in the sleeve and having a ferromagnetic portion engaging the outer surface of the tube on each side of the working air gap, the ferromagnetic portion including a first axial extension and a second axial extension spaced along the longitudinal axis from the first axial extension so as to define a space therebetween, and the first and second axial extensions terminating proximate the working air gap, together in combination with the other claimed features of applicant's invention.

6. The following is an examiner's statement of reasons for allowance of claim 29: The prior art did not teach or suggest a method of assembling a fuel injector as claimed by the applicant, specifically a method comprising the steps of providing a housing having a ferromagnetic inner wall, the ferromagnetic inner wall having an opening with a width that is substantially less than the length of the coil as measured parallel to the longitudinal axis; placing in the housing a coil connectable to an electrical power source and operable to displace the end face toward the pole piece against the resilient bias on the armature assembly; positioning the non-magnetic tube ferromagnetic inner wall between the coil and the non-magnetic tube; positioning the housing

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adjacent the working air gap; and securing the housing to the tube assembly, together in combination with the other claimed step features of applicant's invention.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."


7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven J. Ganey whose telephone number is (703) 308-2585. The examiner can normally be reached on Monday, Tuesday, Thursday and Friday from 8:00 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Mar, can be reached on (703) 308-2087. The fax phone number for this Group is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-1113.

sjg

8/27/04

  
STEVEN J. GANEY  
PRIMARY EXAMINER  
8/27/04